

What is claimed is:

1. A method, comprising:
 - associating each of at least one group of packets forming a bitstream with a stream identifier and a respective sequence code, said at least one group of packets comprising at least one bitstream packet; and
 - transmitting, via any one of a plurality of available transmission channels, each of said at least one group of packets, said transmission channels nominally transmitting NULL packets in the event of underutilization, said at least one group of packets being transmitted in place of said nominally transmitted NULL packets.
2. The method of claim 1, wherein at least one of said at least one group of packets forming said bitstream are correlated with channel identification and time of transmission information for, respectively, indicating which of said plurality of transmission channels will carry respective packet groups and the time said at least one group of packets are carried.
3. The method of claim 1, further comprising:
 - adapting the packet structure for each packet of said at least one group of packets to conform to a network packet structure suitable for use by said transmission channels.
4. The method of claim 3, wherein:
 - said network packet structure comprises a header portion and a payload portion, said payload portion including at least one associated groups of packets.
5. The method of claim 4, wherein:
 - said network packet structure includes stream identifier and sequence code information corresponding to said at least one group of packets included within said payload portion.

6. The method of claim 5, wherein:

said network packet structure includes transmission channel and time of transmission information.

5 7. The method of claim 1, wherein said step of transmitting

comprises:

determining the loading of each of a plurality transmission channels;

determining an allocation of bitstream packets among the transmission channels; and

10 inserting non-allocated bitstream packets into said transmission

channels in place of said nominally transmitted NULL packets.

8. The method of claim 7, wherein said allocation of bitstream

packets among said transmission channels is determined with respect to at

15 least one of the following criteria:

transmission channel data rates, bitstream data rate, transmission channel utilization level, transmission channel loading level, transmission channel scheduling, bitstream quality of service requirement.

20 9. The method of claim 1, wherein a first transmission channel

comprises a primary transmission channel with respect to a first bitstream, wherein an initial portion of said group of packets associated with said first bitstream is transmitted via said first transmission channel and a remaining portion of said packets associated with said first bitstream is transmitted via at

25 least one additional transmission channel.

10. The method of claim 9, wherein said at least one additional

transmission channel is identified by channel identification information associated with some of said at least one group of packets forming said

30 bitstream.

11. The method of claim 10, wherein said at least one group of packets forming said bitstream to be transmitted via said identified channel are further associated with time of transmission information for indicating when such transmission will occur.

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12. The method of claim 11, wherein said step of transmitting comprises launching said at least one group of packets in accordance with channel identification and time of transmission information associated with said at least one group of packets.

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13. Apparatus, comprising:

a bitstream processor, for associating each of at least one group of packets forming a bitstream with a stream identifier and a respective sequence code; and

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a network interface, for causing said associated at least one group of packets to be inserted into any one of a plurality of available transmission channels in place of NULL packets nominally transmitted in the event of transmission channel underutilization.

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14. The apparatus of claim 13, wherein said bitstream processor further associates at least one of said at least one group of packets forming said bitstream with channel identification and time of transmission information for, respectively, indicating which of said plurality of transmission channels will carry respective packet groups and the time said respective packet groups are carried.

15. The apparatus of claim 14, wherein said network interface utilizes said channel identification and time of transmission information to allocate respective transmission channel time slots to said at least one group of packets to be transmitted via said identified channel.

10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53

16. A data structure adapted to the transport of data via a communications network, said data structure comprising a header portion and a payload portion, said payload portion including at least one packet from an initial bitstream, said at least one packet having associated with it a stream identifier and a sequence code, said stream identifier identifying said initial bitstream, said sequence code identifying a relative position within said initial bitstream of said at least one packet.

17. The data structure of claim 16, wherein said stream identifier and
10 said sequence code are stored within said header portion of said data structure.

18. The data structure of claim 16, wherein said stream identifier and said sequence code are stored within the payload portion of said data structure.

15 19. The data structure of claim 16, wherein said at least one packet further is further associated with channel identification and time of transmission information for, respectively, indicating which of a plurality of transmission channels will convey said corresponding at least one packet and at what time said corresponding at least one packet will be conveyed by said identified
20 transmission channel.

20. The data structure of claim 19, wherein said channel identification and time of transmission information are stored within said header portion of said data structure.

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21. The data structure of claim 19, wherein said channel identification and time of transmission information are stored within the payload portion of said data structure.